Tauhid Zaman Curriculum Vitae
zlisto@mit.edu

Education

PhD, Electrical Engineering and Computer Science	MIT	2011
MEng, Electrical Engineering and Computer Science	MIT	2005
BS, Electrical Engineering and Computer Science	MIT	2004

Employment

Employer	Position	Start	End
MIT Sloan School of Management	Assistant Professor	7/2012	Present
The Wharton School	Post-doctoral researcher	9/2011	7/2012
Microsoft Research Cambridge	Intern	6/2010	9/2010

Principal Field(s) of Interest
Social data analytics, business analytics

MIT Activities

Committee	Start	End
Operations Research Center Admissions Committee	2/2014	4/2014

Consulting Activities

Name	Location	Start	End
Washio	Los Angeles, CA	11/2013	6/2014

Awards

	Date
INFORMS Social Media Analytics Best Student Paper Award	11/2016
ONR Grant	6/2017
DARPA SBIR Program Grant (Phase 1)	6/2017
Buchsbaum Fund Grant	5/2015
DARPA STR Program Grant (Phase 2)	1/2014
FDA BAA -13-00119 Grant (Phase 1)	11/2013
Buchsbaum Fund Grant	7/2013
DARPA SBIR Program Grant (Phase 1)	6/2013
Accenture and MIT Alliance in Business Analytics Grant	5/2013
Junior Faculty Research Award	1/2013

Publications

***Note: Co-authors are always listed in alphabetical order except for** Annals of Applied Statistics, Journal of Lightwave Technology, Applied Physics Letters, IEEE Photonics Technology Letters, Workshop on Networks Across Disciplines in Theory and Applications, NIPS, **and** Proceedings of the Conference on Lasers and Electro-Optics.*

1. Theses

T. Zaman, "Information Extraction with Network Centralities: Finding Rumor Sources, Measuring Influence, and Learning Community Structure", MIT PhD Thesis in Electrical Engineering and Computer Science, 2011

2. Refereed Journal Articles

- D. Shah and T. Zaman, "Finding Rumor Sources on Random Trees." *Operations Research* 2016.

- T. Zaman, E. B. Fox, and Eric T. Bradlow, ``A Bayesian Approach for Predicting the Popularity of Tweets." *Annals of Applied Statistics*, 2014.

- S. Bhamidi, J. M. Steele, and T. Zaman, ``Twitter Event Networks and the Superstar Model." *Annals of Applied Probability*, 2014.

- D. Shah and T. Zaman, `` Rumors in a Network: Who's the Culprit?" *IEEE Transactions on Information Theory*, 2011.

- T. Zaman, X. Guo, and R.J. Ram, ``Semiconductor Waveguide Isolators (invited paper)," *Journal of Lightwave Technology*, vol. 26, issue 2, pp. 291 - 301, 2008.

- T. Zaman, X. Guo, and R. J. Ram, ``Faraday Rotation in an InP Waveguide," *Applied Physics Letters*, vol. 90, pp. 023514, 2007.

- T. Zaman, X. Guo, and R. J. Ram, ``Proposal for a Polarization Independent Integrated Optical Circulator," *IEEE Photonics Technology Letters*, vol. 18, no. 12, pp. 1359-1361, 2006.

3. Articles in Refereed Conference Proceedings

- D. Hunter, J. P. Vielma, and T. Zaman, "Picking Winners with Integer Programming", Manufacturing and Service Operations Management 2017.

- Z. Wang and T. Zaman, "Learning Preferences Using Choice and Time Data", Manufacturing and Service Operations Management 2017.

- S. Modaresi, J. Vielma, and T. Zaman, "Strategic Timing of Content in Online Social Networks." Manufacturing and Service Operations Management 2015.

- D. Shah and T. Zaman, ``Rumor Centrality: A Universal Source Detector", Sigmetrics 2012.

- D. Shah and T. Zaman, ``Detecting Sources of Computer Viruses in Networks: Theory

and Experiment", Sigmetrics 2010.

- T. Zaman, R. Herbrich, J. Van Gael, and D. Stern, ``Predicting Information Spreading in Twitter'' Workshop on Networks Across Disciplines in Theory and Applications, NIPS 2010.

- T. Zaman, X. Guo, R. J. Ram, ``Performance Limits to Waveguide Isolators in InP,'' Proceedings of the Conference on Lasers and Electro-Optics, 2007.

- T. Zaman, X. Guo, R. J. Ram, ``Waveguide Faraday Rotation in Fe:InGaAsP,'' Proceedings of the Conference on Lasers and Electro-Optics, 2006.

- T. Zaman, X. Guo, R. J. Ram, ``Integrated Optical Circulator in InP,'' Proceedings of the Conference on Lasers and Electro-Optics, 2005.

- T. Zaman, X. Guo, R. J. Ram, ``Faraday Rotation in Semiconductors for Photonic Integration,'' Proceedings of the Conference on Lasers and Electro-Optics, 2004.

4. Articles in Non-Refereed Conference Proceedings

5. Papers/Articles in Progress or Under Review

- J. Klausen, C. Marks, and T. Zaman, "Finding Online Extremists in Social Networks", (Under 2nd round review in *Operations Research*).

- D. Hunter and T. Zaman, "Picking Winners: A Framework For Venture Capital Investment", (Under 1st round review in *Management Science*).

- C. Marks, and T. Zaman, "Building a Location-Based Set of Social Media Users", (Under 1st round review in *Management Science*).

- D. Hunter, J. P. Vielma, and T. Zaman, "Picking Winners with Integer Programming", (under 1st round review in *Operations Research*).

- C. Mundell, J. P. Vielma, and T. Zaman, "Predicting Performance Under Stress Using Electrodermal Activity", (under 1st round review in *PNAS*)

- Z. Wang and T. Zaman, "Learning User Preferences and Engagement Using Choice and Time Data", (under 1st round review in *Management Science*).

- M. Webb and T. Zaman, "Extracting Personal User Information From Social Media Time Series, (under 1st round review in *Nature*).

- A. Anoun, R. Levi, and T. Zaman, "A Data Driven Approach to Mitigate Risk in Global Food Shipments", (under 1st round review in *PNAS*)

- D. Parthasarathy, D. Shah, and T. Zaman, "Leaders, Followers, and Community

Detection", (working paper).

Other Publications

- T. Zaman, "Does the Amount You Sweat Predict Your Job Performance*?", The Wallstreet Journal*, October 27th, 2016.

- C. Marks and T. Zaman, "A Twitter Recap of INFORMS 2015", *OR/MS Today*, December 2015, 45-46.

Invited Oral Presentations

- "Finding Online Extremists in Social Networks", INFORMS Analytics, April 2017.

- "Finding Online Extremists in Social Networks", Yale Institute for Network Science Distinguished Lecturer Series, October 2016.

- "Optimal Policies for Maximizing Influence in Social Networks", Cornell University Operations Research and Information Engineering Seminar, September 2015.

- "Strategic Timing of Content in Online Social Networks", Applied Probability Society Conference, July 2015.

- "Tweet Time: Optimizing the Timing of Content in Social Media", Twitter Research Seminar, November 2014.

- "Predictive Models of Retweeting in Twitter", UIUC Electrical Engineering and Computer Science Colloquium, November 2013.

- "Predictive Models of Retweeting in Twitter", NYU Stern School of Business Operations Management Seminar, October 2013.

- "Predictive Models of Retweeting in Twitter", Tuck School of Business Operations Seminar, September 2013.

- "Predictive Models of Retweeting in Twitter", Twitter Research Seminar, August 2013.

- "Super Star Model: Predicting the Structure of Retweet Graphs in Twitter", Applied Probability Society Conference, July 2013.

- "Predictive Models of User Behavior in Twitter", MIT Sloan Marketing Seminar, April 2013.

- "Predictive Models of User Behavior in Twitter", MIT ORC Seminar, February 2013.

- "New Models of Information Spreading in Twitter", KAIST University Computer Science Colloquium, November 2012.

- "A Bayesian Approach to Predicting the Popularity of Tweets in Twitter", INFORMS

Annual Meeting October, 2012.

- "Learning Overlapping Community Structure in Social Networks: The Leader-Follower Algorithm", INFORMS Annual Meeting October, 2012.

- "Network Centrality and Source Detection", INFORMS Annual Meeting November, 2011.

Professional Membership and Activities

Memberships
INFORMS
Applied Probability Society
INFORMS Social Media Analytics Subdivision (Vice President)

Review Boards	*Start*	*End*
ACM Sigmetrics	11/2014	2/2015

- Organizer for the 2016 INFORMS Social Media Analytics Best Student Paper Contest
- Organizer for the 2015 INFORMS Social Media Analytics Best Student Paper Contest

- Session Chair:
  - 2016 INFORMS Annual Meeting, "Behavioral Modeling with Social Data" session, Social Media Analytics Cluster
  - 2015 INFORMS Annual Meeting, "Predictive Models of Human Behavior in Social Media" session, Social Media Analytics Cluster
  - 2014 INFORMS Annual Meeting, "Models of Human Dynamics in Social Data" session, Social Media Analytics Cluster
  - 2013 INFORMS Annual Meeting, "Models of Information Diffusion in Social Networks" session, Social Media Analytics Cluster

Subjects Taught

Number	*Title*	*Date*
15.761	Introduction to Operations Management (MBA)	Spring 2016
15.761	Introduction to Operations Management (MBA)	Spring 2015
15.099	Special Seminar in Operations Research: Applications of Operations Research in Social Networks	Fall 2014
15.761	Introduction to Operations Management (LGO)	Summer 2014
15.761	Introduction to Operations Management (MBA)	Spring 2014
15.761	Introduction to Operations Management (LGO)	Summer 2013
15.761	Introduction to Operations Management (MBA)	Spring 2013

Thesis Supervision

Doctoral Theses Supervised
- "Analytic Search Methods in Online Social Networks", Christopher Marks, ORC 2017

Master's Theses Supervised

- "Inferring User Location From Times Series of Social Media Activity", Matthew Webb, ORC 2017
- "A Data-Driven Approach to Mitigate Risk in Global Food Supply Chains", Amine Anoun, ORC 2017
- "A Process Improvement Framework for Achieving Agility for Replenishment", Chinasa Emeghara, LGO 2017
- "Application of Artificial Intelligence Techniques for Root Cause Analysis of Customer Support Calls", Sailashri Parthasarathy, LGO 2017
- "Capacity Analysis and Throughput Increase of an Automated Robotic Fastening System", Matthew Cragun, LGO 2017
- "COAL: A Continuous Active Learning System", Jonathan Johannemann, MFin 2017
- "Interacting with users in social networks: The Follow-back Problem", Krishnan Rajagopalan, ORC 2016
- "Predicting Performance Using Galvanic Skin Response", Lee Carter Mundell, ORC 2016
- "Point-of-Sale Demand Forecasting", Blair Holbrook, LGO 2016
- "Artificial Intelligence Opportunities and a Data Science approach for Hardware Failure Prevention", Mario Orozco, LGO 2016
- "The Johnson and Johnson Journey Deploying SmartOps for Multi-Echelon Inventory Optimization", Arnita Hayden, LGO 2014
- "Leveraging Statistical Process Control for Continuous Improvement of the Manufacturing Process", Stephen Fuller, LGO 2015

Theses in Progress

Name	Program	Degree	Year
David Hunter	ORC	PhD	2nd
Qi Ying	IDSS	PhD	2nd